



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/749,021

12/30/2003

Hao Bi

CS23442RL

8438

20280 7590 10/13/2009  
MOTOROLA INC  
600 NORTH US HIGHWAY 45  
W4 - 39Q  
LIBERTYVILLE, IL 60048-5343

EXAMINER

DESIR, PIERRE LOUIS

ART UNIT

PAPER NUMBER

2617

NOTIFICATION DATE

DELIVERY MODE

10/13/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

DOCKETING.LIBERTYVILLE@MOTOROLA.COM  
ADB035@Motorola.com



UNITED STATES PATENT AND TRADEMARK OFFICE

---

Commissioner for Patents  
United States Patent and Trademark Office  
P.O. Box 1450  
Alexandria, VA 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/749,021  
Filing Date: December 30, 2003  
Appellant(s): BI ET AL.

\_\_\_\_\_  
ROLAND K. BOWLER II  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed July 02, 2009 appealing from the Office action mailed December 10, 2008.

Art Unit: 2617

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

6996722	FAIRMAN ET AL	2-2006
US 20030200499 A1	Khayrallah	10-2003
US 20040081125	Ranta-Aho et al.	4-2004
US 20020141391 A1	HSU	10-2002

Art Unit: 2617

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

The following is a repetition of the rejection found in Final Office Action mailed on 12/10/2008:

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 20-23, and 25 are rejected 35 U.S.C. 103(a) as being unpatentable over Khayrallah, Pub. No. US 20030200499, in view of Fairman et al. (Fairman) U.S. Patent No. 6996722.

Regarding claim 20, Khayrallah discloses a method in wireless communications device, the method comprising:

--receiving a message identifying a channel on which content will be transmitted (i.e., the parameters of the selected traffic channel are sent to the mobile terminal 18 in a channel assignment message that is transmitted on the calling channel or on a temporary channel, which can both be referred to as a "call set-up channel." The mobile terminal 18 then leaves the call set-up channel and commences transmitting and receiving on the assigned traffic channel) (see paragraph 19); receiving first layer content information on a first channel (i.e. a temporal data stream 30 is divided into multiple segments 31, 32, 33. Each segment is then encoded, wherein

Art Unit: 2617

different generated set of transmission are concurrently transmitted in separate communication channels) (see paragraphs 28 and 33); receiving second layer content information on a second channel (i.e. a temporal data stream 30 is divided into multiple segments 31, 32, and 33. Each segment is then encoded, wherein different generated set of transmission are concurrently transmitted in separate communication channels) (see paragraphs 28 and 33), at least one of the first and second channels identified in the message (i.e., the parameters of the selected traffic channel are sent to the mobile terminal 18 in a channel assignment message) (see figs. 3-4, paragraphs 19, 28, and 33), the first and second layer content information is encrypted (i.e., Each segment 31, 32, 33 is then encoded at blocks 41, 42, 43, respectively, utilizing a FEC code) (see figs. 3-4, paragraphs 22, 28-33)---Khayrallah also discloses that the FEC code 26 may be applied, along with other known coding techniques, such as interleaving, convolutional coding, and the like, as an inner code. One or more outer codes, such as parity, **encryption**, Error Correction Codes (ECC), or the like, may be applied to the FEC-encoded N transmission symbols 28, to further enhance the reliability of the wireless communication from RBS 16 to mobile terminals 18 (see paragraph 22). Thus, the first and second layer content is encrypted.

Khayrallah does disclose a method wherein a mobile terminal decodes the received information (see figs. 3-4, paragraphs 22, 28-29, and 33-34).

Khayrallah, however, does not specifically disclose a method comprising decrypting the first layer content information with a first key and decrypting the second layer content information with a second key that is different than the first key.

On the other hand, Fairman discloses a method wherein it is provided a data communication system comprising: a) a remote data source arranged to output a plurality of

Art Unit: 2617

ADUs (e.g., compressed video data are divided into ADUs); b) encryption means for encrypting a plurality of ADUs with different respective keys; c) a communications network connected to the encryption means; d) a customer terminal (i.e., mobile cellular phone) connected to the communications network and arranged to receive encrypted ADUs via the communications network; e) key generation means located in the locality of the customer terminal and arranged to generate a plurality of different keys for decrypting different respective ADUs (see col. 3, line 57-col. 4, line 5).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings as described by Fairman with the teachings disclosed by Khayrallah to arrive at the claimed invention. A motivation for doing so would have been to prevent unauthorized dissemination of data.

Regarding claim 21, Khayrallah discloses a method (see claim 20 rejection) comprising combining the first and second layer content at the wireless subscriber device (see paragraph 29).

Regarding claim 22, Khayrallah discloses a method (see claim 20 rejection) wherein the wireless communications device is a broadcast/multicast subscriber device (see fig. 2, paragraphs 10 and 12), receiving first layer content information includes receiving first layer broadcast/multicast content information (see paragraphs 28 and 33); receiving second layer content information includes receiving second layer broadcast/multicast content information (see paragraphs 28 and 33).

Regarding claim 23, Khayrallah discloses a method (see claim 20 rejection) receiving first layer content information on a first channel includes receiving the first layer content information on a first broadcast channel (see paragraph 28 and 33) (i.e., the data may be divided

Art Unit: 2617

into segments, each segment encoded separately, and transmission symbols from each encoded segment broadcast over a separate communication channel, which may be a TDMA time slot, a CDMA spreading encoding, an FDMA frequency, or a frequency hopping pattern) (see paragraph 10).

Regarding claim 25, Khayrallah discloses a method (see claim 20 rejection) wherein at least one of the first and second layer content information is encrypted (i.e., Each segment 31, 32, 33 is then encoded at blocks 41, 42, 43, respectively, utilizing a FEC code, wherein encryption is applied to the FEC-encoded transmission) (see paragraphs 22, 28 and 33).

Although Khayrallah discloses a method as described, Khayrallah does not specifically disclose a method comprising receiving at least one decryption key for the at least one decrypted first and second layer content information, decrypting the at least one decrypted first and second layer content information with the decryption key.

However, Fairman discloses a method wherein it is provided a data communication system comprising: a) a remote data source arranged to output a plurality of ADUs (e.g., compressed video data are divided into ADUs); b) encryption means for encrypting a plurality of ADUs with different respective keys; c) a communications network connected to the encryption means; d) a customer terminal (i.e., mobile cellular phone) connected to the communications network and arranged to receive encrypted ADUs via the communications network; e) key generation means located in the locality of the customer terminal and arranged to generate a plurality of different keys for decrypting different respective ADUs (see abstract and col. 3, line 57-col. 4, line 5).

Art Unit: 2617

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings as described by Fairman with the teachings disclosed by Khayrallah to arrive at the claimed invention. A motivation for doing so would have been to prevent unauthorized dissemination of data.

4. Claims 27-30, 32, 34-37 are rejected 35 U.S.C. 103(a) as being unpatentable over Khayrallah, in view of Ranta-Aho et al. (Ranta-Aho), Pub. No. US 20040081125, and Fairman.

Regarding claim 27, Khayrallah discloses a method in wireless communications network infrastructure entity, the method comprising: transmitting first layer broadcast/multicast service content information on a first channel (i.e. a temporal data stream 30 is divided into multiple segments 31, 32, and 33. Each segment is then encoded, wherein different generated set of transmission are concurrently transmitted in separate communication channels) (see paragraphs 28 and 33); transmitting second layer broadcast/multicast service content information on a second channel (i.e. a temporal data stream 30 is divided into multiple segments 31, 32, and 33. Each segment is then encoded, wherein different generated set of transmission are concurrently transmitted in separate communication channels) (see paragraphs 28 and 33), the first and second channels are downlink channels (i.e., from the radio base station to the mobile station) (see fig. 1, paragraphs 28 and 33), the first layer broadcast/multicast service content information related to the second layer broadcast/multicast service content information (i.e., the same data is divided into segments. Therefore the divided segments are related to each other) (see paragraphs 10 and 28).



Art Unit: 2617

Although Khayrallah discloses a method wherein content is transmitted on a broadcast channel, Khayrallah does not specifically disclose a method wherein at least one of the first and second channels is a shared broadcast channel and comprising encrypting the first and second layer broadcast/multicast service content information using different encryption keys before transmitting.

However, Ranta-Aho discloses a method wherein downlink shared channel is used for multicasting (see paragraphs 17 and 46).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings as described by Khayrallah with the teachings described by Ranta-Aho to arrive at the claimed invention. A motivation for doing so would have been to save network resources.

However, the combination of Khayrallah and Ranta-Aho does not specifically disclose a method comprising encrypting the first and second layer broadcast/multicast service content information using different encryption keys before transmitting.

However, Fairman discloses a method wherein it is provided a data communication system comprising: a remote data source arranged to output a plurality of ADUs (e.g., compressed video data are divided into ADUs); and encryption means for encrypting a plurality of ADUs with different respective keys (see abstract and col. 3, line 57-col. 4, line 5).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings as described by Fairman with the teachings disclosed by Khayrallah and Ranta-Aho to arrive at the claimed invention. A motivation for doing so would have been to prevent unauthorized dissemination of data.

Art Unit: 2617

Regarding claim 28, Khayrallah discloses a method (see claim 27 rejection) wherein transmitting a message identifying at least one of the first and second channels before transmitting the first and second broadcast/multicast service content information (i.e., transmission of channel assignment message) (see paragraph 19).

Regarding claim 29, Khayrallah discloses a method (see claim 27 rejection) comprising transmitting the first layer broadcast/multicast service content information and transmitting the second layer broadcast/multicast service content information substantially simultaneously (i.e., concurrently) (see paragraph 28).

Regarding claim 30, Khayrallah discloses a method (see claim 27 rejection) wherein transmitting the first layer broadcast/multicast service content information and transmitting the second layer broadcast/multicast service content information with sufficient temporal proximity to enable substantially synchronized integration of the first and second layer broadcast/multicast service content information by a recipient (see paragraphs 28 and 33).

Regarding claim 32, Khayrallah discloses a method (see claim 30 rejection) comprising transmitting third layer broadcast/multicast service content information on a second channel, the third layer broadcast/multicast service content information related to the first and second layer content information (see paragraphs 28 and 33).

Although, Khayrallah discloses a method as described, Khayrallah does not specifically disclose a method wherein the channel is a shared channel.

However, Ranta-Aho discloses a method wherein downlink shared channel is used for multicasting (see paragraphs 17 and 46).

Art Unit: 2617

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings as described by Khayrallah with the teachings described by Ranta-Aho to arrive at the claimed invention. A motivation for doing so would have been to save network resources.

Regarding claim 34, Khayrallah discloses a method (see claim 27 rejection) the first layer broadcast/multicast service content information is baseline broadcast/multicast service information transmitted on a broadcast channel (i.e., basic subgroup) (see claim 18 of the reference); the second layer broadcast/multicast service content information is baseline broadcast/multicast service enhancement information transmitted on a second shared broadcast channel (i.e., enhanced subgroups) (see claim 18 of the reference).

Regarding claim 35, Khayrallah discloses a method (see claim 27 rejection) wherein at least one of the first and second layers capable of being decoded (i.e., processed) and used without the other of the first and second layers (see paragraph 29).

Regarding claim 36, Khayrallah discloses a method in broadcast/multicast subscriber device, the method comprising: receiving first layer content information on a first channel (see paragraph 28); receiving second layer content information on a second channel (see paragraph 28), at least one of the first and second channels is a broadcast channel (i.e., wireless channel that supports a multicast service) (see paragraph 28).

Although, Khayrallah discloses a method as described, Khayrallah does not specifically disclose a method wherein the channel is a shared channel.

However, Ranta-Aho discloses a method wherein downlink shared channel is used for multicasting (see paragraphs 17 and 46).

Art Unit: 2617

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings as described by Khayrallah with the teachings described by Ranta-Aho to arrive at the claimed invention. A motivation for doing so would have been to save network resources.

Khayrallah, however, does not specifically disclose a method comprising decrypting the first layer content information with a first key and decrypting the second layer content information with a second key that is different than the first key.

On the other hand, Fairman discloses a method wherein it is provided a data communication system comprising: a) a remote data source arranged to output a plurality of ADUs (e.g., compressed video data are divided into ADUs); b) encryption means for encrypting a plurality of ADUs with different respective keys; c) a communications network connected to the encryption means; d) a customer terminal (i.e., mobile cellular phone) connected to the communications network and arranged to receive encrypted ADUs via the communications network; e) key generation means located in the locality of the customer terminal and arranged to generate a plurality of different keys for decrypting different respective ADUs (see col. 3, line 57-col. 4, line 5).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings as described by Fairman with the teachings disclosed by Khayrallah to arrive at the claimed invention. A motivation for doing so would have been to prevent unauthorized dissemination of data.

Art Unit: 2617

Regarding claim 37, Khayrallah discloses a method (see claim 36 rejection) comprising integrating the first and second layer content information at the wireless communications device (see paragraph 29).

5. Claims 31 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Khayrallah, Ranta-Aho, and Fairman, further in view of Hsu, Pub. No. US 20020141391.

Regarding claim 31, the combination (Khayrallah, Ranta-Aho, and Fairman) discloses a method as described (see claim 27 rejection).

Although the combination discloses a method as described, the combination does not specifically disclose a method comprising transmitting the second layer broadcast/multicast service content information on a dedicated channel.

However, Hsu discloses a method wherein broadcast content is transmitted on a dedicated broadcast (see paragraph 70).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings as described by Khayrallah, Ranta-Aho, and Fairman with the teachings of Hsu to arrive at the claimed invention. A motivation for doing so would have been to improve user perception in broadcast quality.

Regarding claim 33, the combination (Khayrallah, Ranta-Aho, and Fairman) discloses a method as described (see claim 27 rejection).

Fairman, however, does disclose a method wherein keys (i.e., reliability information) to decrypt received content are sent via a communication network to one or more terminal, the combination does not specifically disclose a method comprising transmitting reliability

Art Unit: 2617

information on a third channel, the reliability information for decoding at least one of the first and second layer broadcast/multicast service content information.

However, Hsu discloses a method wherein encryption information (i.e., reliability information) to decrypt a content is provided over a dedicated channel during a packet data session (see paragraph 67).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings as described by the Khayrallah, Ranta-Aho, and Fairman with teachings disclosed by Hsu to arrive at the claimed invention. A motivation for doing so would have been to prevent unauthorized dissemination of data.

#### **(10) Response to Argument**

As related to claim 20, Appellant argues that Khayrallah does not disclose encryption, and that neither Khayrallah nor Fairman disclose receiving “first layer content” and “second layer content”.

Examiner respectfully disagrees.

First, it should be noted that Appellant is correct in disclosing that error correction coding is not encryption. Examiner never stated otherwise. What has been stated by Examiner is the fact that the cited reference, i.e., Khayrallah discloses that other coding techniques such as encryption is used with the FED coding scheme.

Khayrallah discloses that parameters of selected traffic channel are sent to the mobile terminal in a channels assignment message, wherein each segment is encoded utilizing a FEC code (see figs. 3-4, paragraphs 19, 22, 28-33). Furthermore, Khayrallah discloses that the FEC

Art Unit: 2617

code may be applied, along with other known coding techniques, such as **encryption** (see paragraph 22).

Therefore, appellant's assertion that there is no reason to encrypt the separate data streams in Khayrallah with different keys is moot for the fact that Khayrallah does disclose encryption of the divided data stream. And in combination with Fairman which discloses using different encryption to encrypt data and using different decryption keys to decrypt the data (see col. 3, line 57-col. 4, and line 5), the combination reads on the claim as written.

Regarding appellant's arguments that neither Khayrallah nor Fairman discloses first and second layer contents, Khayrallah discloses that a temporal data stream 30 is divided into multiple segments 31, 32, and 33. Each segment is then encoded, wherein different generated set of transmission are concurrently transmitted in separate communication channels (see paragraphs 28 and 33). Therefore, Khayrallah discloses a first layer content and a second layer content (i.e., segment 31, 32, or 33).

Regarding claim 21, Appellant argues that Khayrallah and Fairman fail to suggest in combination with claim 20 "...combining the first and second layer content at the wireless subscriber device."

Examiner respectfully disagrees.

As disclosed above, data stream 30 is divided into multiple segments 31, 32, and 33. In paragraph 39, Khayrallah discloses that once the mobile terminal successfully receives and decodes any transmission symbols, it may begin to replay segment 31 of the data stream 30. And as data stream segment 32, and 33 are reconstructed from received information symbols, these

Art Unit: 2617

segment are appended to segment 31 and presented to the user of the mobile terminal as a continuous data stream 30.

Therefore, the mobile terminal decodes and combined the received information, i.e., segment, and presented a continuous data stream 30 to the user.

As related to claim 27, Appellant argues that Khayrallah does not disclose encryption, and that neither Khayrallah nor Fairman disclose receiving “first layer broadcast/multicast content” and “second layer broadcast/multicast content”.

Examiner respectfully disagrees.

Khayrallah discloses that parameters of selected traffic channel are sent to the mobile terminal in a channels assignment message, wherein each segment is encoded utilizing a FEC code (see figs. 3-4, paragraphs 19, 22, 28-33). Furthermore, Khayrallah discloses that the FEC code may be applied, along with other known coding techniques, such as encryption (see paragraph 22).

Therefore, it is clear that Khayrallah discloses encryption that is other coding technique applied along with the FEC code.

Regarding appellant’ arguments that neither Khayrallah nor Fairman discloses first and second layer broadcast/multicast contents, Khayrallah discloses that a temporal data stream 30 is divided into multiple segments 31, 32, and 33. Each segment is then encoded, wherein different generated set of transmission are concurrently transmitted in separate communication channels (see paragraphs 28 and 33). Therefore, Khayrallah discloses a first layer content (i.e., segment 31, 32, or 33, and a second layer content (i.e., segment 31, 32, or 33).



Art Unit: 2617

It should be noted that the response applied to claim 20 above also applies to claim 27.

Regarding claim 29, Appellant argues that the cited references fail to suggest in combination with claim 27 "...transmitting the first layer broadcast/multicast service content information and transmitting the second layer broadcast/multicast service content information substantially simultaneously."

Examiner respectfully disagrees.

Khayrallah discloses that a temporal data stream 30 is divided into multiple segments 31, 32, and 33. Each segment is then encoded, wherein different generated set of transmission are **concurrently** transmitted in separate communication channels (see paragraphs 28 and 33).

Regarding claim 30, Appellant discloses that the cited references fail to suggest in combination with claim 27 "...transmitting the first layer broadcast/multicast service content information and transmitting the second layer broadcast/multicast service content information with sufficient temporal proximity to enable substantially synchronized integration of the first and second layer broadcast/multicast service content information by a recipient."

Examiner respectfully disagrees.

Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

Furthermore, Khayrallah discloses a data stream is divided into multiple segments, wherein each segment is encoded. Different generated set of transmission are concurrently transmitted concurrently (see paragraphs 28 and 33). The claim and the specification call for sufficient temporal proximity, which would encompass simultaneous or concurrent transmission.

Art Unit: 2617

Therefore, Khayrallah's disclosure of concurrent transmission does read on the claim since the concurrent transmission allows the synchronization of the different encoded segment into data stream 30 (see paragraphs 28-29, 33).

Regarding claim 36, Appellant argues that Khayrallah does not suggest encryption, nor does it disclose receiving first and second layer broadcast/multicast service content.

As previously indicated above, Khayrallah discloses that FEC code may be applied, along with other known coding techniques, such as **encryption** (see paragraph 22). Thus, the disclosed segment is coding using FEC code and other coding techniques, such as encryption.

Therefore, since Khayrallah discloses encryption, therefore, combining Khayrallah with Fairman, which discloses decryption of applications using different keys, is proper.

Khayrallah further discloses that a temporal data stream 30 is divided into multiple segments 31, 32, and 33. Each segment is then encoded, wherein different generated set of transmission are concurrently transmitted in separate communication channels (see paragraphs 28 and 33). The transmitted segments are received at a mobile terminal which presents the combined segments (i.e., synchronization of the segments into data stream 30) to the user.

Also, the response applied to claim 20 above also applies to claim 36.

Regarding claim 37, Appellant discloses that the cited references fail to suggest in combination with claim 36 "...integrating the first and second layer content information at the wireless communication device."

As disclosed above, data stream 30 is divided into multiple segments 31, 32, and 33. In paragraph 39, Khayrallah discloses that once the mobile terminal successfully receives and decodes any transmission symbols, it may begin to replay segment 31 of the data stream 30. And

Art Unit: 2617

as data stream segment 32, and 33 are reconstructed from received information symbols, these segment are appended to segment 31 and presented to the user of the mobile terminal as a continuous data stream 30.

Therefore, the mobile terminal decodes and integrated the received information, i.e., segment, and presented a continuous data stream 30 to the user.

Regarding claim 31, Appellant argues that the prior art fails to disclose in combination with claim 27 "...transmitting the second layer broadcast/multicast service content information on the second channel by the transmitting the second layer broadcast/multicast service content information on a dedicated channel. Appellant further submits that a "dedicated channel" is not the same as a "dedicated broadcast channel." Appellant also asserts that a dedicated channel is a point to point channel whereas a dedicated broadcast channel is a point to multipoint channel.

Examiner respectfully disagrees with applicants.

First, as known in the art, a dedicated channel may be defined as a channel that is used for one purpose or may be a logical channel that is allocated to an individual user. Therefore, a dedicated broadcast channel may be defined as a channel that is dedicated to a user to receive broadcast information. And, the present application describes broadcast/multicast service information is transmitted on a dedicated channel, i.e., a channel that is dedicated to transmit broadcast/multicast service information to a user. Therefore, the dedicated channel described in the present specification is a dedicated channel used to transmit broadcast/multicast service information and hence a dedicated broadcast channel.

In the specification of the present application, it is disclosed that broadcast/multicast communication service is the simultaneous transmission of the same information to multiple

Art Unit: 2617

users (see page 1, lines 16-17), and that broadcast/multicast service information is transmitted on multiple dedicated channels to corresponding subscribers.

Hsu discloses that a single broadcast channel can carry one or more HSBS channels; in this case, the HSBS channels will be multiplexed in a time-division Multiplex fashion within the single broadcast channel (see paragraph 50), and that broadcast content is transmitted on a dedicated broadcast channel (paragraph 70). Furthermore, Hsu describes that existing unicast channels may be used, i.e., one forward link channel per MS with no sharing of F-FCH (or the F-DCCH) on both forward and reverse link channels (paragraph 54). however, this passage, although it specifies the use of dedicated channel, does not apply to broadcast/multicast of information, which by definition means transmission of the same information to a plurality of mobile terminals.

Both the present application and Hsu describe broadcast/multicast information using dedicated channel. Therefore, one skilled in the art would appreciate that data is transmitted on a channel that is dedicated for broadcasting the data, i.e., dedicated broadcast channel.

Regarding claim 33, Appellant discloses that the prior art fails to disclose in combination with claim 27 "...transmitting information on a third channel, the reliability information for decoding at least one of the first and second layer broadcast/multicast service content information." Contrary to the Examiner's assertion, continue appellant, encryption information is not the same as reliability information.

Examiner respectfully disagrees.

In the present application, as can be attested by the claim language itself, reliability information is for decoding the content. Therefore, any information that is used for decoding

Art Unit: 2617

content information may be interpreted as reliability information since the Appellant does not describe what other information may constitute reliability information.

As known in the art, decrypting is the process of decoding that has been encrypted. In the specification there is no description of "reliability" other than information that is used to decode the content. And since decrypting is the process of decoding data, the cited reference, i.e., Hsu, does read on the claim for Hsu describes the process of sending encryption information that comprises BAK, which is used to decrypt the data, wherein the BAK is sent on a dedicated channel (see paragraph 67).

Furthermore, Khayrallah discloses that data stream is divided into multiple segment wherein each segment is encoded using FEC. Redundancy information is also added by the encoding process and transmitted over a separate channel (see paragraphs 10-11)

And, most importantly, Khayrallah discloses that mobile terminal may receive and decode transmission symbols on a second channel distinct from transmission symbol received on the first channel. The transmission symbols received on the second channel provide additional redundancy, and allows the mobile terminal to successfully receive and decode a total of at least  $K+A$  transmission symbols, thus enabling to fully recover the  $K$  information symbols of the source data (see paragraph 34) Therefore, reliable information is transmitted on a separate channel, which allows decoding of data.

Art Unit: 2617

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Desir, Pierre-Louis

/PIERRE-LOUIS DESIR/

Examiner, Art Unit 2617

Conferees:

/Dwayne D. Bost/  
Supervisory Patent Examiner,  
Art Unit 2617

/George Eng/  
Supervisory Patent Examiner, Art Unit 2617